

CLAIMS

1.-17. (Canceled)

18. (Previously Presented) A multi-partition computer system, comprising:
a plurality of cell boards, with each cell board including at least one main processor;
and

a service processor that is connected to each of the cell boards;
wherein each partition includes at least one cell board, each partition is prevented
from accessing memory of a different partition, the service processor can command the
operations of the partitions, and the service processor can reset a partition.

19. (Previously Presented) The computer system of claim 18, wherein:
each partition is running an operating system that is independent of the other
partitions.

20. (Previously Presented) The computer system of claim 18, wherein:
the service processor communicates with the cell boards via at least one USB format
bus.

21. (Previously Presented) The computer system of claim 18, wherein:
each cell board may be replaced while the computer system is on-line.

22. (Previously Presented) The computer system of claim 18, wherein:
the service processor manages configuration of the partitions.

23. (Previously Presented) A multi-partition computer system, comprising:
a plurality of cell boards, with each cell board including at least one main processor;
and
a service processor that is connected to each of the cell boards;
wherein each partition includes at least one cell board, and the service processor
manages operations of the partitions, and each partition is prevented from accessing memory
of a different partition, and
the service processor monitors power requirements and determines whether a new
component may be added to the system based upon the power required for the new
component.

24. (Previously Presented) The computer system of claim 23, wherein:
the service processor can command the operations of the cell boards.

25. (Previously Presented) A multi-partition computer system, comprising:
a plurality of cell boards, with each cell board including at least one main processor;
and
a service processor that is connected to each of the cell boards;
wherein each partition includes at least one cell board, the service processor manages
operations of the partitions, each partition is prevented from accessing memory of a different
partition, and the service processor monitors log events.

26. (Previously Presented) The computer system of claim 25, wherein:
the service processor displays selected log events to a user.

27. (Previously Presented) A multi-partition computer system, comprising:
a plurality of cell boards, with each cell board including at least one main processor;
and
a service processor that is connected to each of the cell boards;
wherein each partition includes at least one cell board, the service processor manages
operations of the partitions, each partition is prevented from accessing memory of a different
partition, and the service processor monitors status of the cells.

28. (Previously Presented) The computer system of claim 27, wherein: the service processor facilitates JTAG scan testing of the computer system.

29. (Previously Presented) The computer system of claim 27, wherein: the service processor displays the status of the cells to a user.

30. (Previously Presented) The computer system of claim 27, wherein: the service processor monitors environmental condition of the cells.

31. (Previously Presented) A multi-partition computer system, comprising: a plurality of cell boards, with each cell board including at least one main processor;

and

a service processor that is connected to each of the cell boards;

wherein each partition includes at least one cell board, the service processor manages operations of the partitions, each partition is prevented from accessing memory of a different partition, and the service processor updates firmware resident in the cells.

32. (Previously Presented) A method for operating a computer system having a plurality of partitions and a plurality of cell boards, with each cell board including at least one main processor, wherein each partition includes at least one cell board, the method comprising:

providing a service processor that is connected to each of the cell boards; managing operations of the partitions via the service processor; preventing each partition from accessing memory of a different partition; commanding the operations of the partitions via the service processor; and resetting at least one partition via the service processor.

33. (Previously Presented) The method of claim 32, further comprising: running an operating system on each partition that is independent of the other partitions.

34. (Previously Presented) The method of claim 32, further comprising: using at least one USB format bus to provide communications between the service processor and the cell boards.

35. (Previously Presented) The method of claim 32, further comprising: replacing at least one cell board while the computer system is on-line.

36. (Previously Presented) The method of claim 32, further comprising: managing the configuration of the partitions via the service processor.

37. (Previously Presented) The method of claim 32, wherein: maintaining security for the computer system via the service processor; wherein the service processor limits access to authorized users.

38. (Previously Presented) A method for operating a computer system having a plurality of partitions and a plurality of cell boards, with each cell board including at least one main processor, wherein each partition includes at least one cell board, the method comprising:

providing a service processor that is connected to each of the cell boards; managing operations of the partitions via the service processor; preventing each partition from accessing memory of a different partition; monitoring the power requirements via the service processor; and determining, via the service processor, whether a new component may be added to the system based upon the power required for the new component.

39. (Previously Presented) The method of claim 38, further comprising: commanding the operations of the cell boards via the service processor.

40. (Previously Presented) A method for operating a computer system having a plurality of partitions and a plurality of cell boards, with each cell board including at least one main processor, wherein each partition includes at least one cell board, the method comprising:

providing a service processor that is connected to each of the cell boards; managing operations of the partitions via the service processor; preventing each partition from accessing memory of a different partition; and monitoring log events via the service processor.

41. (Previously Presented) The method of claim 40, further comprising: displaying selected log events to a user, via the service processor.

42. (Previously Presented) A method for operating a computer system having a plurality of partitions and a plurality of cell boards, with each cell board including at least one main processor, wherein each partition includes at least one cell board, the method comprising:

providing a service processor that is connected to each of the cell boards;
managing operations of the partitions via the service processor;
preventing each partition from accessing memory of a different partition; and
monitoring the status of the cells via the service processor.

43. (Previously Presented) The method of claims 42, further comprising:
displaying the status of the cells to a user via the service processor.

44. (Previously Presented) The method of claim 42, further comprising:
monitoring the environmental condition of the cells via the service processor.

45. (Previously Presented) A method for operating a computer system having a plurality of partitions and a plurality of cell boards, with each cell board including at least one main processor, wherein each partition includes at least one cell board, the method comprising:

providing a service processor that is connected to each of the cell boards;
managing operations of the partitions via the service processor;
preventing each partition from accessing memory of a different partition; and
updating firmware resident in the cells via the service processor.